

I claim:

Device for injecting sublimable particles into a pressurized stream of gas comprising:

1. an endless rotational energy connecting element passing over a driven rotational transmission member and one or more idle rotational transmission members with a plurality of conveying members attached to said endless rotational energy connecting element that passes through a supply of sublimable particles conveying with it sublimable particles before passing through an airlock assembly,  
said airlock assembly comprised of a passage to receive pressurized gas at one end and discharge it mixed with sublimable particles at the opposite end and a second passage intersecting the first passage that said endless rotational energy connecting element passes through with a means to restrict gas from escaping where said endless rotational energy connecting element enters and exits said second passage
2. The device of claim 1 wherein said an endless rotational energy connecting element passing over a driven rotational transmission member and one or more idle rotational transmission members with a plurality of conveying members attached to said endless rotational energy connecting element is a driven endless conveyor.
3. The device of claim 2 wherein said driven endless conveyor is an adjustable speed cable type conveyor.
4. The device of claim 1 wherein said endless rotational energy connecting element is a cable.
5. The device of claim 1 wherein said means to restrict gas from escaping where said endless rotational energy connecting element enters and exits said second passage is a plurality of v-seals inside both ends of said second passage.
6. The device of claim 5 wherein said plurality of v-seals are made of PTFE.

A blast cleaning apparatus for use with sublimable media, a source of pressurized gas, and a nozzle, said blast cleaning apparatus comprising:

7. an air lock assembly comprised of a passage to receive pressurized gas at one end and to discharge it mixed with sublimable particles at the opposite end and a second passage intersecting the first that has an endless conveyor passing through it with a means to

restrict the leakage of gas past the points where said endless conveyor enters and exits said second passage,

said endless conveyor has a plurality of attached conveyor members passing over a driven sprocket and one or more idler sprockets that passes through a supply of sublimable particles conveying said sublimable particles into said air lock assembly.

8. The device of claim 7 wherein said means to restrict the leakage of gas past the points where said endless conveyor enters and exits said second passage is a plurality of v-seals inside both ends of said second passage.

9. The device of claim 8 wherein said plurality of v-seals are made of PTFE.

10. The device of claim 7 wherein said endless conveyor is an adjustable speed cable type conveyor with a plurality of disk shaped conveying members attached.

11. A method to inject sublimable particles into a pressurized stream of gas, comprising the steps of:

- (a) providing a stream of pressurized gas,
- (b) providing a gas passage,
- (c) passing said stream of pressurized gas through said gas passage,
- (d) providing a second passage that intersects said gas passage,
- (e) providing an endless loop conveyor that passes through a supply of sublimable particles before passing through said second passage,
- (f) providing a means to restrict the leakage of gas past the points where said endless loop conveyor enters and exits said second passage, and
- (g) injecting said stream of pressurized gas with said sublimable particles with said endless loop conveyor,

whereby said stream of pressurized gas is injected with sublimable particles.